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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,212	09/30/2003	Kang Soo Seo	1740-000058US	9584

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EXAMINER	
ZHAO, DAQUAN	
ART UNIT	**PAPER NUMBER**
2621	

MAIL DATE	DELIVERY MODE
06/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,212	SEO ET AL.	
	Examiner	Art Unit	
	Daquan Zhao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/21/2004,9/29/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

TTG 5/28/07

Claims 1-8 ~~and 11~~ are rejected under 35 U.S.C. 101 because when nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. The "data structure for managing reproduction of graphic data" recited in claim 1 is considered to be nonfunctional descriptive material. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus,

nonstatutory music is not a computer component, and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

Claims 2-8 are also affected.

TTQ 5/28/07

~~Claim 11 is rejected for the same reasons as discussed in claim 1 above.~~

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 9, 10, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hisatomi (US 6,112,011).

Regarding claims 1 and 11, Hisatomi teaches a recording medium having a data structure for managing reproduction of graphic data (e.g. abstract and column 2, lines 36-43, graphic data is corresponding to sub-picture data), comprising: a graphic information area including at least one graphic image information segment (e.g. column 21, line 66- column 22, line 20, the SYNCI included in the DSI shown in figure 48 corresponding to the graphic image information or column 22, line 21- column 23, line 6, the display control sequence table for the sub-picture is also corresponding to the "graphic image information") and at least one palette information segment, each palette information segment providing color information (e.g. column 18, lines 35-53, the PGC

sub-picture palette are 16 color palettes for all sub-pictures of the PGC), each graphic image information segment providing reproduction information for reproducing one or more graphic images (e.g. SYNCI includes address information on the sub-pictures for reproduction or the display control sequence table in figure 52, the SP_DCCMD is in the SP_DCSQ, which is in the control sequence table).

Regarding claim 9, Hisatomi teaches a method of reproducing a data structure for managing reproduction of graphic data from a recording medium, comprising: reproducing at least one graphic image information segment and at least one palette information segment from the recording medium, each palette information segment providing color information, each graphic image information segment providing reproduction information for reproducing one or more graphic images (e.g. column 23, lines 7-35, "SET_COLOR" command contains the code of a color pallet).

Regarding claim 10, Hisatomi teaches an apparatus for reproducing a data structure for managing reproduction of graphic data from a recording medium, comprising: a driver for driving an optical reproducing device to reproduce data recorded on the recording medium; a controller for controlling the driver to reproduce at least one graphic image information segment and at least one palette information segment from the recording medium, each palette information segment providing color information, each graphic image information segment providing reproduction information

for reproducing one or more graphic images (e.g. figure 1, column 23, line 36- column 24, line 8).

Regarding claim 2, Hisatomi teaches the reproduction information identifies a palette information segment to use in reproducing one or more graphic images (e.g. figure 53 shows every sub-picture contains a display control sequence table, wherein the DCSQ has set_color command to set the color code of the pixels of the sub-picture data).

Regarding claim 4, Hisatomi teaches each palette information segment has an identifier; and the reproduction information identifies a palette information segment using the identifier for the palette information segment (e.g. the set_color command contains the code of the color pallet).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi (US 6,112,011) as applied to claims 1, 2, 4, 9, 10, 11 above.

See the discussion above.

For claim 12, Hisatomi fails to teach an encoder for encoding at least multiple reproduction path video data. The examiner takes official notice for an encoder for encoding at least multiple reproduction path video data since that's well know in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to have incorporated an encoder for encoding at least multiple reproduction path video data in the system disclosed by Hisatomi to reproduce the video data promptly.

4. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi (US 6,112,011) as applied to claims 1, 2, 4, 9, 10, 11 above, and further in view of Parks et al (US 6,850,228 B1).

See the teaching of Hisatomi above.

For claims 3 and 8, Hisatomi fails to specify sharing the same palette information. Parks et al teach sharing the same palette information (e.g. column 8, lines 26-41). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Parks et al into the teaching of Hisatomi to reduce the number of bit used for the color component for fast processing speed.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi (US 6,112,011) as applied to claims 1, 2, 4, 9, 10, 11 above, and further in view of Fujimoto (US 5,912,710).

See the teaching of Hisatomi above.

For claims 5 and 6, Hisatomi fails to teach the blending ratio. Fujimoto teaches the blending ratio (e.g. column 6, lines 28-39). It would have been obvious for one ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujimoto into the teaching of Hisatomi to improve the quality of the display picture (Fujimoto, column 3, lines 7-12).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi (US 6,112,011) as applied to claims 1, 2, 4, 9, 10, 11 above.

See the teaching of Hisatomi above.

For claim 7, Hisatomi fails to teach the BD-ROM. The examiner takes official notice for the BD-ROM since it is well known in the art. It would have been obvious for one ordinary skill in the art at the time the invention was made to have utilized the BD-ROM to increase the storage capacity.

Conclusion

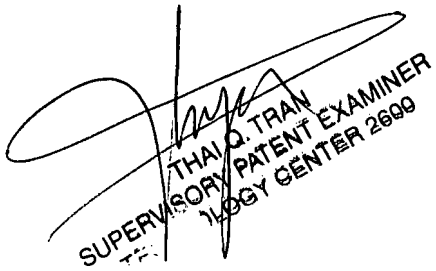
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miwa et al (US 6,553,179 B1) and Kikuchi et al (US 5,721,720).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daquan Zhao whose telephone number is (571) 270-1119. The examiner can normally be reached on M-Fri. 7:30 -5, alt Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai Q, can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daquan Zhao



Tran Thai Q
Supervisory Patent Examiner